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	No.: 3050-004	Application No.:	10/8	20,638					
Applicant:	Dunstan et a	ıl.							
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Examiner Initial*	Document Number	Date	Name	Class	Sub Class	Filing Date If Appropriate			
	4,310,400	1/12/82	Mark, Jr., et al.	204	195 M				
	5,552,241	9/3/96	Mamantov, et al.	429	103				
	5,827,602	10/27/98	Koch, et al.	429	194				
	5,589,291	12/31/96	Carlin, et al.	429	103				
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	Document Number	Date	Country	Class	Sub Class	Translation Yes or No			
	OTHER D	OCUMENTS	(Including Author, Tit	le, Date, P	ertinent Pa	ges, Etc.)			
			dic Stability of Several lo. 3 (March 1996)	Anions Co	omprising S	colvent-Free Ionic Liquids, J.			
	Lipsztajn, et al., Electrochemical Reduction of N-(1-Butyl)Pyridinium Cation In 1-Methyl-3-Ethylimidazolium Chioride-Aluminium Chloride Ambient Temperature Ionic Liquids, Electrochemica Acta, Vol. 29, No. 10, pp 1349-1352, (1984)								
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	1349-1352, (1984 Fannin, Jr., et al.,	Properties o	f 1,3-Dialkylimidazo <i>l</i> iu	m Chloride	ds, Electroc 				
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	1349-1352, (1984 Fannin, Jr., et al., Transitions, Dens Suarez, et al., The Complexes, Polyl Suarez, et al., En and water-stable Wilkes, et al., Air Commun., pp. 96 Gifford, et al., Air	Properties of ities, Electrice Use Of New nedron, Vol. Ilarged electric molten salts, and Water S (1992) Substituted In	f 1,3-Dialkylimidazoliu al Conductivities, and v Ionic Liquids in Two- 15, No. 7, pp. 1217-12 ochemical window in d Electrochimica Acta, table 1-Ethyl-3-methyl	m Chloride Viscosities Phase Ca 19 (1996) lialkyl-imid Vol. 42, No limidazoliu	e-Aluminums, J. Phys. Catalytic Hydrocatalytic Hydrocatal	hemica Acía, Vol. 29, No. 10, pp  Chloride Ionic Liquids. 2. Phase them, 88, 2614-2621 (1984) ogenation Reaction By Rhodium ion based room-temperature air 533-2535 (1997) nic Liquids, J. Chem Soc., Chem.			
	1349-1352, (1984 Fannin, Jr., et al., Transitions, Dens Suarez, et al., The Complexes, Polyl Suarez, et al., En and water-stable Wilkes, et al., Air Commun., pp. 96 Gliffort, et al., A Electrochemical I	Properties of Pr	11,3-Dialkylimidazofiu 11,3-Dialkylimidazofiu v lonic Liquids in Two- 15, No. 7, pp. 1217-12 schemical window in d Electrochimica Acta, v table 1-Ethyl-3-methyl nidazofium Chloroalum lectrochem. Soc., Vol.	m Chloride Wiscosities Phase Ca 19 (1996) tialkyl-imid Vol. 42, No timidazoliu ninate Molt 134, No.3	a-Aluminum s, J. Phys. ( Italytic Hydr azolium cat b. 16, pp. 25 m Based lo cen Salt Pos pp. 610-6 Anions, tran	hemica Acía, Vol. 29, No. 10, pp  Chloride Ionic Liquids. 2. Phase chem, 88, 2614-2621 (1984) ogenation Reaction By Rhodium ion based room-temperature air 533-2535 (1997) nic Liquids, J. Chem Soc., Chem.			
	1349-1352, (1984 Fannin, Jr., et al., Transitions, Dens Suarez, et al., The Complexes, Polyl Suarez, et al., En and water-stable Wilkes, et al., Ar Commun., pp. 96 Gifford, et al., As Electrochemical Niyazymbetov, et Nauk SSSR, Seri (October, 1987)	Properties o dities, Electric e Use Of New hedron, Vol. "I larged electric molten salts, and Water S 5-966 (1992) Substituted In Window, J. E. al., Electrociya Khimichei dydrophobic,	11,3-Dialkylimidazofiu 11,3-Dialkylimidazofiu w lonic Llquids in Two- 15, No. 7, pp. 1217-12 pochemical window in d Electrochimica Acta, table 1-Ethyl-3-methyl nidazofium Chloroalum ectrochem. Soc., Vol. hemical Oxidation of N skaya, No. 10, pp. 238	m Chloride m Chloride Viscosities -Phase Ca 19 (1996) lialkyl-imid Vol. 42, No. limidazoliu ninate Molt 134, No.3 litroazole 90-2391, pi	ds, Electroc  a-Aluminum  s, J. Phys. C  talytic Hydr  azolium cat  o. 16, pp. 2:  m Based lo  ten Salt Pos  b, pp. 610-6  Anions, tran  ublished by	hemica Acía, Vol. 29, No. 10, pp  Chloride Ionic Liquids. 2. Phase Chem, 88, 2614-2621 (1984) ogenation Reaction By Rhodium ion based room-temperature air 333-2535 (1997) nic Liquids, J. Chem Soc., Chem. ssessing an Increased 14 (March 1987) slated from Izvestiya Akademii			
	1349-1352, (1984 Fannin, Jr., et al., Transitions, Dens Suarez, et al., The Complexes, Polyl Suarez, et al., En and water-stable Wilkes, et al., Air Commun., pp. 96 Gifford, et al., A s Electrochemical V Niyazymbetov, et Nauk SSSR, Seri (October, 1987) Bonhote, et al., F pp. 1168-1178 (1) Scordilis-Kelley,	Properties o itiles, Electric e Use Cf Neinedron, Vol. : larged electromotlen salts, and Water S 55-966 (1992) Substituted In Window, J. E. : al., Electrocy al., Electrocy ya Khimichet diydrophobic, 996) et al., Alkali M.	11,3-Dialkylimidazofiu 11,3-Dialkylimidazofiu w lonic Liquids in Two- 15, No. 7, pp. 1217-12 cohemical window in d Electrochimica Acta, table 1-Ethyl-3-methyl idazofium Chloroalum lectrochem. Soc., Vol. hemical Oxidation of N skaya, No. 10, pp. 238 Highly Conductive Am	m Chloride m Chloride m Chloride Viscosities Phase Ca 19 (1996) tialkyl-imid Vol. 42, No timidazoliu ninate Molt 134, No.3 titroazole 10-2391, pi bient-Tem	os, Electroc  Aluminum  s, J. Phys. C  talytic Hydr  azolium cat  b. 16, pp. 2:  m Based lo  ten Salt Pos  b, pp. 610-6  Anions, tran  ublished by  perature M  ured in Chli	hemica Acía, Vol. 29, No. 10, pp  Chloride Ionic Liquids. 2. Phase Chem, 88, 2614-2621 (1984) ogenation Reaction By Rhodium ion based room-temperature air 333-2536 (1997) nic Liquids, J. Chem Soc., Chem. sessing an Increased 14 (March 1987) slated from Izvestiya Akademii Plenum Publishing Corp., olten Salts, Inorg. Chem. Vol., 35, proaluminate Ambient-			

	Fuller, et al. Structure of 1-Ethyl-3-methylimidazolium Hexafluorophosphate: Model for Room Temper Molten Salts, J. Chem. Soc., Chem. Commun., pp. 299-300. (1994)							
	Fuller, et al., The Room Temperature Ionic Liquid 1-Ethyl-3-methylimidazolium Tetrafluoroborate: Electrochemical Couples and Physical Properties, J. Electrochem. Soc., Vol. 144, No. 11, pp. 3881-3886. (November 1997).							
	Carlin, et al., Dual Intercalating Molten Electrolyte Batteries, J. Electrochem. Soc., Vol. 141, No. 7, pp. L73-L76. (July 1994).							
	Carlin, et al., Reversible Lithium-Graphite Anodes in Room-Temperature Chloroaluminate Melts, J. Electrochem. Soc., Vol. 141, No. 3, pp. L21-L22. (March 1994).							
	Scordilis-Kelley, et al., Stability and Electrochemistry of Lithium in Room Temperature Chloroalumin Molten Salts, J. Electrochem. Soc., Vol. 141, No. 4, pp. 873-875. (April 1994).  Fuller, et al. In Situ Optical Microscopy Investigations of Lithium and Sodium Film Formation in Bufft Room Temperature Molten Salts, J. Electrochem. Soc., Vol. 143, No. 7, pp. L145-L147. (July 1996)							
	Koch, et al., The Interfacial Stability of Li with Two New Solvent-Free Ionic Liquids: 1,2-Dimethyl-3- propylimidazolium Imide and Methide, J. Electrochem. Soc., Vol. 142, No. 7, pp. L116-L118. (July 1995)							
	Caja, et al., Room Temperature Molten Salts (Ionic Líquids) as Electrolytes in Rechargeable Lithium Batteries, published in SAE Aerospace Power Systems Conference (April 6-8, 1999), Mesa, Arizon. 217-222.							
Examiner				Date Considered				
*Examiner:	Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							
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